

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

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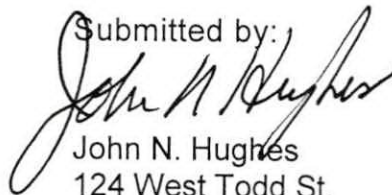
In the Matter of:

APPLICATION OF KENTUCKY FRONTIER GAS)
LLC FOR APPROVAL OF MODIFICATION OF AMR) CASE NO.
AND PIPELINE REPLACEMENT PROGRAMS,) 2016-00132
SURCHARGES AND TARIFFS TO INCLUDE THE)
FORMER PUBLIC GAS SYSTEM)

RESPONSE TO COMMISSION'S FIRST REQUEST FOR INFORMATION

Kentucky Frontier Gas. LLC ("Frontier"), by counsel, submits its responses to the Commission's Order of July 19, 2016.

Submitted by:



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DECLARATION OF STEVEN SHUTE

I, Steven Shute, am a Member of Kentucky Frontier Gas, LLC, the Applicant in the referenced matter. I have read the Responses and I have full authority to sign this declaration. The facts set forth therein are true and correct to the best of my knowledge, information and belief. Pursuant to KRS 523.020-040, I certify under penalty of false swearing that the foregoing is true and correct.

Dated this 1st day of August, 2016.

A handwritten signature in black ink, appearing to read 'S. Shute', is written over a horizontal line. The signature is somewhat stylized and includes a checkmark-like flourish.

Steven Shute

Member-Manager, Kentucky Frontier Gas,
LLC

1. Refer to Frontier's Application, page 4, paragraphs 6.c. and 6.d. Of the 200-meter difference between roughly 1,800 meters. including spares. in the Public Gas Company ("Public") system and approximately 1,600 paying customers in the system, provide a breakdown of the 200 meters into all pertinent categories—spare meters, meters on abandoned customer premises. etc.

Witness: Shute

Response: Frontier has tried to identify premises where future gas service is not likely, and to remove those meters instead of leaving them in place, as Public had done. The January 2016 billing included 1598 paying customers. The Public Gas records at the time of transfer had information on about 1800 meters. Some older meters have since been retired, but most others are now spares held either in the Jackson or Prestonsburg warehouses or being tested and refurbished at the 2 contract meter shops.

2. Refer to Frontier's Application, page 5, paragraph 7. Provide a breakdown showing by material type, age, size, and length, the mains to be replaced on the Public system.

Witness: Shute

Response: Frontier is working on a better inventory of the Public Gas pipeline system. On the DOT Annual Reports, Public Gas had reported 4 miles of coated and protected steel pipe, and 1 mile of bare unprotected pipe. The most current GIS maps were developed by the former owner GNI from earlier CAD and manual maps, without extensive investigation or digging to verify the size or material. Frontier worked with GNI before closing the purchase to identify some of these sections. Results were not definitive, but Frontier believes the bare steel sections are mostly in Jackson, and consist of about 7000 ft of 2-3-4-inch bare steel pipe installed in the 1960s. These sections will be replaced in roughly the same location with typically the same diameter of PE pipe, and any steel service lines off these mains will be replaced with PE services.

3. Refer to the Direct Testimony of Steven Shute, P.E. ("Shute Testimony"), page 3, response to Item 9.

a. Explain whether the \$65 cost per meter is for an Automated Meter Reading ("AMR") module only, or a meter with an AMR module pre-installed.

b. Explain whether the \$70 cost per meter (\$35,000 to replace 500 meters) is for a standard meter, or a meter with AMR capabilities pre-installed.

c. With estimated AMR costs of \$155,000 and only \$135,000 in surcharge revenues over the planned seven-year period, explain whether Frontier has given any consideration to developing a surcharge more aligned with the estimated AMR costs for the Public system.

d. Explain how the \$20,000 shortfall will be financed.

Witness: Shute

Response:

3.a. Each AMR radio module costs about \$65.

3.b. Frontier will use a mix of refurbished and new meters, for which a residential sized meter costs \$50 to \$75. The AMR module is additional. About 20% of Public meters are 175s that will be replaced with new 250 meters. Most of the existing 250s can be refurbished and converted to TC as needed. There are about 80 commercial size meters 425 and larger, which cost \$300 to \$4000 to replace. Most of these are older meters that aren't practical to refurb. The average cost of all meter replacements is expected to be \$70 each, again without the AMR module.

3.c. Frontier briefly considered a different AMR surcharge for Public, but decided that it is far easier to administer the same surcharge to every Frontier customer. Meters are fungible and will be refurbished and traded across all Frontier systems, so tracking Public meter costs separately from other Frontier meters would be highly difficult and impractical. The present state of Public meters is very close to that of the overall Frontier system before the AMR project was started.

3.d. The estimated \$20,000 shortfall will be capitalized out of continuing cash flow.

4. Refer to the Shute Testimony, page 4, response to Item 11, which indicates that 90 percent of all meters are 20 years or older. Explain whether Frontier has evaluated if it might be cheaper to refurbish and retrofit meters with AMR modules or to replace them with AMR capable meters.

Witness: Shute

Response: For the other 4000 Frontier meters as well as 1600 Public customers, Frontier has extensively planned for how to implement AMR with the most impact in the least time ("bang for the buck"). We have used a mix of new-refurbished-tested meters to standardize all meters to a single brand, with standard meter spud sizes and a single AMR module. We first upgraded meters and installed AMR in areas with the most difficult and time-consuming meter reading routes, first the scattered farm taps, then the rural areas with widely scattered homes, then thicker areas. We have evaluated Public Gas similarly, and can use the Frontier experience to maximize AMR implementation in Public. In general, as we have started in Frontier, we will refurbish (including TC if needed) all serviceable 250 meters ca 1983 and newer. In the first few years, we will test & re-use older 175 and 250 meters with TC that will take a standard AMR module, to get the most AMRs in service quickly. As we get near the end of AMR installations, we will retire and replace all older 175-225-250-275 meters as part of the AMR and meter upgrading project.

5. Refer to the Shute Testimony. pages 6-7, response to Item 17.

a. Explain the term "mandated relocates" and describe all associated projects in the proposed Pipeline Replacement Program ("PRP").

b. Explain the need for upgrading and replacing the mains and services in the low-pressure distribution systems in Jackson and Hazel Green.

Witness: Shute

Response:

5.a. "Mandated relocates" are usually KyDOT highway projects that require the relocation of gas mains and services due to road improvement and realignment. Frontier has some large KyDOT mandated relocates currently going for the Mountain Parkway at Salyersville and several new bridges in Magoffin County. In all of these, the new road construction would obliterate sections of the Frontier system, so we relocate facilities out ahead of roadbuilding. These projects are impossible to predict as to location, scope or cost.

5.b. As discussed in question 2 above, nobody knows the precise details of where the bare steel pipelines are all located. From our investigation, Frontier believes most of the bare steel is located in Jackson, much of it in low-pressure systems. Bare steel pipe is impossible to make reliably safe with cathodic protection, so all bare steel will be replaced. We will prioritize the upgrading of these low-pressure systems much as we have for Meters and AMR, with a bang-for-buck approach where the first conversions will require the least main replacement. For instance, we believe that Hazel Green is all-PE pipe and will be one of the first projects.

6. Refer to the Shute Testimony, page 8. response to Item 21. Describe the current and historic levels of leaks due to corrosion failure in the Public system.

Witness: Shute

Response: Frontier received some historic records of past leak surveys and repairs, but they weren't very informative. The 4 operating employees we incorporated from Public have 4-4-1-0 years of experience with Public Gas, and no prior gas experience, so there is not much institutional history. The DOT annual reports 2006-15 show 35 corrosion leaks or 3.2 per year. Neither Frontier nor its operators have any good way to verify these figures, but this seems plausible for 7000 ft of bare steel pipe. One of my favorite professional assignments was Manager of Corrosion Control for a large regional gas utility with 15,000 miles of steel pipe, including several thousand miles of bare steel. From that experience, the only practical way to deal with bare steel pipe is to find the leaks and replace the steel pipe with PE in 500 ft segments (that being the typical roll of 2-inch PE pipe). We will use that approach in Public Gas systems.

7. Refer to the Shute Testimony, pages 8-9, response to Item 22. The estimated cost of replacing 7,000 feet of bare steel pipe under the PRP over seven years is \$140,000, while the \$1.25 surcharge will generate \$168,000 in PRP revenues over that time period. Explain whether Frontier has given any consideration to developing a surcharge more aligned with the estimated PRP cost for Public's system.

Witness: Shute

Response: Frontier's approach to PRP is similar to AMR, see the response to 3.c. above. The cost of individual regulators & re-piping & testing & uprating isn't included in the \$140,000 estimate cited, nor any contingencies like KyDOT relocates. All of these costs are difficult to predict without a specific project identified. As the AMR & PRP projects mature and we better identify the steel replacement projects, the Public and Frontier projects may become evidently distinct. For now, they look pretty much the same, enough to use the same surcharges and priority schemes.